



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: AS907-1-1A BYPASS RATIO: 4.2  
 UNIQUE ID NUMBER: 8HN001 PRESSURE RATIO ( $\pi_{00}$ ): 22.0  
 COMBUSTOR: RATED THRUST ( $F_{00}$ ) (kN): 30.6  
 ENGINE TYPE: TF

REGULATORY DATA **\*\* DATA SUPERSEDED \*\*** SEE FOLLOWING UID FOR REVISED DATA: **11HN003**

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	16.3	94.9	66.3	24.1
AS % OF ORIGINAL LIMIT	83.3	80.4	79.0	73.5
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			98.7	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			99.9	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			100.6	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			106.5	

DATA STATUS

- PRE-REGULATION  
 x CERTIFICATION  
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES  
 - DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 x OUT OF PRODUCTION (DATE: 2011 )  
 - OUT OF SERVICE (DATE: - )

MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	0.347	0.01	0.69	26.29	18.3
CLIMB OUT	85	2.2	0.288	0.01	0.56	21.51	18.4
APPROACH	30	4.0	0.104	0.08	2.98	9.39	8.7
IDLE	7	26.0	0.048	4.30	30.21	4.20	3.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			152	325	2368	1751	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				10.6	77.3	57.2	18.7
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				0.8	1.9	0.1	
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				9.8-11.5	75.1-78.8	57.1-57.2	

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS  
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	96.5-97.5
TEMPERATURE (K)	292-296
ABS HUMIDITY (kg/kg)	0.0037-0.0057

FUEL

SPEC	Jet A
H/C	1.87
AROM (%)	16.5

MANUFACTURER: Honeywell  
 TEST ORGANIZATION: Honeywell  
 TEST LOCATION: Phoenix, AZ  
 TEST DATES: 10/01/2002-11/01/2002

REMARKS

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)